

REMARKS

Information Disclosure Statement

As an initial matter, Applicants would like to point out that the Examiner failed to acknowledge consideration of the references on the second page of the IDS by not providing a signature. Applicants respectfully request acknowledgement of consideration of these references in the next Office Action.

Objections to the claims

The Examiner has objected to claims 16-22 and 24-27 for reciting the phrase "comprising the step of." Applicants have amended these claims accordingly and respectfully request that the objection be withdrawn.

Rejections under 35 U.S.C. § 112

The Examiner has rejected claims 2-6 and 11-14 under 35 U.S.C. § 112 as being indefinite. The Examiner alleges that there is insufficient antecedent basis in claims 6 and 11 for the phrase "the security information." Since there is no recitation of "the security information" in claim 6, Applicants will assume the Examiner meant to indicate its absence in claim 2. Applicants would like to respectfully draw the Examiner's attention to claim 2, lines 1-2, and claim 11, line 10, where "a fourth network device having security information" is recited. Sufficient antecedent basis is therefore present and, accordingly, Applicants respectfully request that the § 112 rejection be withdrawn.

Rejections of the Claims in View of the Prior Art

In the Office Action dated July 29, 2004, the Examiner rejected claims 1-9, 15-17, 19, and 22-25 under 35 U.S.C. § 103(a) as being unpatentable over *Adelman* (U.S. Pat. No. 6,006,259) in view of *Thomas et al.* (U.S. Pat. No. 5,151,899). The Examiner further rejected claims 10-14, 18, 20, 26, and 27 under 35 U.S.C. § 103(a) as being unpatentable over *Adelman* (U.S. Pat. No. 6,006,259) in view of *Thomas et al.* (U.S. Pat. No. 5,151,899) and in further view of *Medvinsky* (WO 00/62507). The Examiner failed to indicate the status of claim 21. For the reasons given below, Applicants respectfully submit that the references taken alone or in combination fail to disclose, teach, or even suggest the presently claimed invention, and requests that the § 103 rejection of the claims be withdrawn.

The present application discloses a system and method for switching security associations from a first communication to a second communication within a network by handing off security information from an active network device to a standby network device in a case where the active device has failed. The application uses a pre-defined sequence number limit less than a maximum sequence number for the first communication, and an initial sequence number greater than the pre-defined sequence number limit for the second communication, which ensures that replay prevention will be enabled for both communications. The security association has already been negotiated for the first communication when the first communication was established between network devices. Since the same security association is used in both communications, there is no need to re-negotiate a security association for the second communication. None of the prior art references disclose or even suggest these features.

The *Adelman* reference discloses an IP network clustering system that is particularly concerned with load balancing by redistributing communications from a first active network device to a second active device in a case where the first device fails. *Adelman* does not disclose, teach, or even suggest, however, a security association being transferred from one device to another. Moreover, as acknowledged by the Examiner, *Adelman* does not disclose the use of predefined sequence numbers to enable replay prevention. The other references do not remedy the shortcomings of *Adelman*. Therefore, the rejection is improper and should be withdrawn.

The Examiner maintains that *Adelman* discloses a standby network device taking over for a failed active network device in column 1, lines 62-63. However, *Adelman* is simply disclosing background art, and this method is actually used by a prior art CISCO product, not by *Adelman*. *Adelman* is in fact attempting to provide a remedy to the problems created by the CISCO product, and goes on to state that the CISCO product is flawed because "the standby unit does not keep state information on each connection, all active connections are dropped and must be re-established by the clients." See *Adelman*, column 2, lines 2-4. *Adelman* is actually trying to overcome the deficiencies of the CISCO product, and therefore essentially *teaches away* from using a standby network device. Applicants' invention provides a remedy to the deficiencies of the CISCO system, which does not use the same security association for both the standby device and the failed active device, by allowing security information to be handed off from an active device to a standby device without dropping a connection or having to re-negotiate a security association. For these reasons alone, the rejection is improper and Applicants respectfully request that it be withdrawn.


Furthermore, neither the *Thomas* nor the *Medvinsky* references disclose, teach, or even suggest the use of a system that allows security information to be handed off from an active device to a standby device without dropping a connection or having to re-negotiate a security association. In addition, neither *Thomas* nor *Medvinsky* disclose, teach, or suggest using a pre-defined sequence number limit less than a maximum sequence number for a first secure communication and/or an initial sequence number greater than the pre-defined sequence number limit for a second secure communication. Indeed, none of these references remedy the deficiencies listed above with respect to *Adelman*.

In view of the foregoing, Applicants respectfully request that all of the rejections of the pending claims 1-7 and 9-27 be withdrawn. Applicants hereby earnestly solicit an early Notice of Allowance. If for any reason, the application is not considered to be in condition for allowance on the next Office Action and an interview would be helpful to resolve any remaining issues, the Examiner is requested to contact the undersigned attorney at (312) 935-2356.

Respectfully submitted,

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